RESULTS (1) Compared with control group, the expression of 4 mRNAs related to coagulant factors (FGB, F5, F8 and F13) was obviously elevated ($P<0.05$) in patients with CAD, and the expression of 2 mRNAs (F5 and F8) among 14 genes was significantly up-regulated ($P<0.01$) in the AMI groups. (2) In AMI group, the expression of all mRNAs related to anticoagulant factors was higher than SAP and control groups, especially, the expression of 3 mRNA(TFPI THBD and SERPINA1) among 8 gens was significantly up-regulated ($P<0.01$). (3) Compared with control group, the expression of 3 fibrolysis factor-related mRNAs (SERPINE1 PLAU and PLAUR) was significantly up-regulated ($P<0.01$) in both groups AMI and SAP. PLAT mRNA expression was not obviously elevated and PLG mRNA expression was down-regulated in AMI and SAP groups.

CONCLUSIONS In this study, there were imbalances in the expression of mRNAs among coagulation, anticoagulation and fibrinolysis: the expression of many mRNAs related to coagulant factors and anticoagulant factors was significantly up-regulated, and the expression of mRNAs related to fibrinolytic system was disordered.

This disequilibrium plays an important role in the progression of coronary artery disease and arterial thrombosis.

GW26-e1456

The Clinical Characteristics, Treatment Status and Their Relations to Prognosis among Patients Admitted to Tertiary A TCM hospital for Acute Myocardial Infarction

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OBJECTIVES To improve clinical quality and patient outcomes in tertiary A TCM hospitals by providing evidence-base findings which obtained through investigation done on patients' characteristics, treatments status and prognosis among patients admitted for AMI during 2013.

METHODS This research is done through analysis of all AMI in-patient medical records sampled from 29 participated TCM hospitals based on the diagnosis and treatments guideline for MI issued by Chinese Medical Association. Cases data were obtain through standardized CRF that looks into patients' clinical characteristics, treatment and prognosis. Data were managed with Microsoft SQL Server. We adopted descriptive analysis method on general information with SPSS 15.0, while logistic regression method was employed to conduct multiplicity analysis on their related prognosis. Statistical significant was defined as $P\leq0.05$.

RESULTS Total of 1217 AMI patients were reported to be admitted by the 29 hospitals which agreed to participate in this research from 1st, Jan to 31st Dec, 2013. Mean age of the sampled patients was 65.48±12.96 years old, among which, 52.42% were over 65 years old, 357(29.55%) were female. 402 patients (34.04%) has been smoking regularly while 225 (19.50%) has been regular drinker; 61.16%, 32.00% and 34.63% were reported to be associated with HTN, DM and hyperlipidemia respectively. 439 patients (37.91%) had historical diagnosis of CHD, 136(12.18%) had MI; 218 patients (18.59%) had CVD. Meanwhile, 686 cases (59.04%) of STEMI patients were found among all studied patients; 291 cases (24.87%) were diagnosed with arrhythmias on admission. The rate of patients with in-hospital Killip classification I, II, III, IV was 54.15%, 23.50%, 8.79%, 7.97% separately. The most frequently occurred TCM syndromes type of deficient were: heart-QI deficiency (62.37%), heart-YIN deficiency (19.15%), spleen& kidney-QI deficiency (10.19%). 1053(86.52%) cases showed symptoms of blood stasis, while 606 (49.80%) showed characteristics of phlegm and retained fluid. 536(44.04%) patients underwent early reperfusion treatments. 1101 (90.47%) and 530 (43.55%) of all cases had received Chinese patent drug intravenously and orally, 741(60.89%) patients had been given TCM decoction subscriptions. After eliminated interactions effects, our finding indicates the following factors has significant influences on the death rate of studied AMI patients: age, history of diabetes, arrhythmia, Killip classification, TCM clinical manifestations of spleen & kidney-QI deficiency or cold coagulation, early revascularization, oral Chinese patent drug and TCM decoction.

CONCLUSIONS Findings suggested that the risk factors of in-hospital mortality including: age≥65 years, previous medical history of diabetes or arrhythmia, Killip classification≥I, TCM clinical manifestations of spleen& kidney-QI deficiency or cold coagulation. Meanwhile, early reperfusion, oral Chinese patent drug and decoction may have positively improved short-term prognosis of AMI patients.

GW26-e2511

The Correlation Analysis between plasma Cystatin C and the prognosis of patients with STEMI

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OBJECTIVES In recent years, the mortality of acute ST segment Elevation Myocardial Infarction (STEMI) has been increased. Early assessment for prognosis of STEMI patients is very significant. Although there already have some clinical marker for predicting the prognosis of STEMI, it's still dissatisfied. Preliminary research showed that Cystatin C (Cys-C) has the independent prediction value for STEMI. It seems to be that Cys-C might be involved in atherosclerotic processes. Another study show that Cys-C and its fragments may also affect the phagocytic and chemotactic ability of neutrophil, participates in the inflammatory process and regulates inflammatory responses. This study aims to analysis the correlation between plasma Cys-C and the MACE in STEMI patients.

METHODS Hospitalized patients in coronary care unit of the First Affiliated Hospital of Harbin Medical University from January 2012 to December 2013 are selected. Patients were diagnosed as STEMI. A total of 445 patients are selected. Observation indicator is the major adverse cardiovascular events (MACE) occurrence of those patients in-hospital and out-hospital. Patients are divided MACE group and non- MACE group. Statistical analysis is performed. ROC curves of Cys-C, hsCRP, TnI and CKMB are respectively drawn. The predictory value fer MACE as well as to determine the threshold value. According to the concentration of plasma Cys-C, patients are divided high concentration group and low concentration group, and respectively statistical analysis for two group patients, thus evaluating the correlation among plasma Cys-C level, the prognosis and adverse events of patients with STEMI.

RESULTS 1. The single factor analysis shows that the average value of Cys-C in the MACE group is 1.09 ± 0.23 mg/L, while in the non-MACE group it is 0.82 ± 0.15 mg/L, and there is statistical difference between two groups ($P < 0.0001$).

2. Multiple factors analysis shows that OR value of Cys-C is 9.710, 95% CI (5.971, 5.971), indicating that Cys-C is an independent risk factor of AMI.

3. The area under ROC curve of Cys-C is 0.8431, higher than that of Hs-CRP (0.6249), TNI (0.544) and CK-MB (0.5569). The best cutoff values that Cys - C predicting the MACE in STEMI patients is 0.94 mg/L, the sensitivity was 77.14%, specificity of 80.85%.

4. With terms in-hospital stay, out-hospital in 1 ~ 6 months and in 7 ~12 months, in comparison, the incidence of MACE for the higher concentration group are 57%, 31.64% and 48.57%, and the lower group are 17.96%, 2.49% and 7.08% separately, $P<0.05$; and for terms in-hospital stay, out-hospital within 1 ~ 6 months and within 7 ~12 months, the total mortality of higher concentration group is 11.5%, 30% and 48.5%, and the lower concentration group, 1.63%, 2.04% and 8.89% separately, $P<0.05$.

CONCLUSIONS There might be some correlation between the Cys-C and the MACE in STEMI patients. Cys-C is an independent risk factor and potential prognosis indicator for MACE that happens both in-hospital and out-hospital in STEMI patients.

GW26-e4568

Mean Platelet Volume is the Predictor of Poor Myocardial Perfusion post Primary PCI

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OBJECTIVES Mean platelet volume (MPV) is shown to be the predictor of poor clinical outcome, as well as poor TIMI flow in patients receiving primary percutaneous coronary intervention (PPCI). But the correlation of MPV and myocardial perfusion has not been well demonstrated. So the aim of our study was to investigate the relationship between pre-intervention MPV and myocardial perfusion post PPCI in patient with acute ST-segment elevation myocardial infarction (STEMI).

METHODS Total of 168 consecutive patients from 2012, January to 2014, December suffered from STEMI undergoing PPCI were analyzed retrospectively. The inclusion criteria were (1) age>65yrs; (2) PPCI was performed within 12 hours from symptom onset; (3) the infarct-related artery (IRA) was totally occluded; and (4) post intervention flow was TIMI 2 or greater. Exclusion criteria were (1) post history of myocardial infarction, CABG or PCI of IRA; (2) presentation with shock or cardiac arrest; (3) TIMI 1 or greater flow at IRA at initial angiography; and